

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the claim amendments and following remarks.

By virtue of the amendments above, Claims 1, 3, 24, and 29 have been amended. In addition, Claims 16-23 have been withdrawn from consideration as being drawn to a non-elected invention. Accordingly, Claims 1-15 and 24-34 are pending, of which, Claims 1 and 24 are independent.

No new matter has been introduced by way of the claim amendments; entry thereof is therefore respectfully requested.

Restriction Requirement

Although Applicants respectfully disagree with the Restriction Requirement, Applicants have withdrawn the non-elected Claims 16-23 from further consideration in this application.

Drawings

Figure 1 has been objected to for failing to include a "Prior Art" legend. Submitted herewith is an amended version of Figure 1, which includes the "Prior Art" legend, and which has been labeled as a "Replacement Sheet". The Examiner is respectfully requested to enter the amended Figure 1 and to therefore withdraw the objection to Figure 1.

Claim Rejection Under 35 U.S.C. §102

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

Therefore, if the cited reference does not disclose each and every element of the claimed invention, then the cited reference fails to anticipate the claimed invention and, thus, the claimed invention is distinguishable over the cited reference.

U.S. Patent No. 6,031,954 to Higuchi

Claims 1-15 and 24-34 have been rejected under 35 U.S.C. §102(b) as allegedly being unpatentable over the disclosure contained in U.S. Patent No. 6,031,954 to Higuchi. This rejection is respectfully traversed for at least the following reasons.

Independent Claims 1 and 24 have been amended to include, *inter alia*, that the input of each of the plurality of substantially totally internally reflecting light guides encompasses a relatively smaller cross-sectional area as compared with the output of each of the light guides, where the cross-sectional areas are taken perpendicularly with respect to the lengths of each light guide. In other words, the cross-sectional areas of the inputs differ from the cross-

sectional areas of the outputs for each of the plurality of substantially totally internally reflecting light guides, as shown in Figures 2 and 3 of the originally filed application.

Higuchi pertains to an optical guide 21 inserted between an LCD panel 1 and a diffusion plate 41. (Abstract). The optical guide 21 is formed of a large number of optical fibers 24 having an exit surface 23. As depicted in Figures 1, 3, and 4, for instance, Higuchi shows that the optical fibers 24 encompass the same cross-sectional area throughout the entire lengths of the optical fibers 24. In addition, Higuchi does not appear to disclose in its written disclosure that the optical fibers 24 have inputs that encompass relatively smaller cross-sectional areas as compared to their outputs. Higuchi also does not appear to disclose that the optical guide 21 is designed to house optical fibers 24 having differently sized inputs and outputs.

Accordingly, Higuchi apparently fails to disclose that the input of each light guide encompasses a relatively smaller cross-sectional area as compared with the output of each light guide, where the cross-sectional areas are taken perpendicularly with respect to a length of each light guide, as claimed in independent Claims 1 and 24. As such, it is respectfully submitted that Higuchi fails to disclose each and every element claimed in independent Claims 1 and 24 of the present invention and therefore cannot anticipate these claims. The Examiner is therefore respectfully requested to withdraw this rejection and to allow Claims 1 and 24 and the claims that depend therefrom.

Claims 2-15 and 25-34 are also allowable over Higuchi for reasons in addition to those discussed above with respect to independent Claims 1 and 24. For instance, Higuchi fails to disclose that the optical fibers 24 each have a bend along their lengths as set forth in Claim 3 of the present invention. In addition, Higuchi fails to disclose that the aspect ratios

for the inputs of the optical fibers 24 differ from aspect ratios for the outputs of the optical fibers, as claimed in Claim 29 of the present invention. Support for the features claimed in Claim 29 may at least be found on page 10, lines 25-30 of the Specification.

U.S. Patent No. 5,381,502 to Veligdan

Claims 1-5, 12, 15, 24-26, 29, and 31 have been rejected under 35 U.S.C. §102(b) as allegedly being unpatentable over the disclosure contained in U.S. Patent No. 5,381,502 to Veligdan. This rejection is respectfully traversed for at least the following reasons.

Independent Claims 1 and 24 have been amended as discussed above.

Veligdan discloses an optical panel 10 having a plurality of waveguides 12 stacked together. As most clearly depicted in Figures 2 and 7, Veligdan shows that the first ends 12a encompass the same cross-sectional areas as the second ends 12b of the waveguides 12. In addition, Veligdan does not appear to disclose in its written disclosure that the waveguides 12 have inputs that encompass relatively smaller cross-sectional areas as compared to their outputs, where the cross-sectional areas are taken perpendicularly with respect to the lengths of the waveguides 12.

Accordingly, Veligdan apparently fails to disclose that the input of each light guide encompasses a relatively smaller cross-sectional area as compared with the output of each light guide, as claimed in independent Claims 1 and 24 of the present invention. As such, it is respectfully submitted that Veligdan fails to disclose each and every element claimed in independent Claims 1 and 24 of the present invention and therefore cannot anticipate these claims. The Examiner is therefore respectfully requested to withdraw this rejection and to allow Claims 1 and 24 and the claims that depend therefrom.

Claims 2-15 and 25-34 are also allowable over Veligdan for reasons in addition to those discussed above with respect to independent Claims 1 and 24. For instance, Veligdan fails to disclose that the waveguides 12 each have a bend along their lengths as set forth in Claim 3 of the present invention. In addition, Veligdan fails to disclose that the aspect ratios for the first ends 12a of the waveguides 12 differ from aspect ratios for the second ends 12b of the waveguides 12, as claimed in Claim 29 of the present invention.

Claim Rejection Under 35 U.S.C. §102 or 35 U.S.C. §103(a)

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in MPEP § 706.02(j):

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Therefore, if the above-identified criteria are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

Claims 13, 14, and 30

Claims 13, 14, and 30 have been rejected under U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,381,502 to Veligdan. This rejection is respectfully traversed for at least the following reasons.

The Official Action correctly notes that Veligdan fails to disclose the use of air as the claimed material of lower index or acrylic as the claimed substantially totally internally reflecting light guide. This section of the Official Action, however, does not address nor cures the deficiencies in Veligdan discussed above. More particularly, this section of the Official Action fails to prove that Veligdan discloses waveguides having inputs that encompass relatively smaller cross-sectional areas as compared with outputs of the waveguides.

Accordingly, Veligdan fails to render obvious all of the features of at least independent Claims 1 and 24 of the present invention. Accordingly, Claims 13, 14, and 30 which depend from independent Claims 1 and 24, respectively, are allowable over the disclosure contained in Veligdan. The Examiner is therefore respectfully requested to withdraw the rejection of Claims 13, 14, and 30, and to allow these claims.

Claims 6-11, 27, 28, and 32-34

Claims 6-11, 27, 28, and 32-34 have been rejected under U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,381,502 to Veligdan in view of U.S. Patent 4,003,080 to Maiman et al. This rejection is respectfully traversed for at least the following reasons.

The Official Action correctly notes that Veligdan fails to disclose that the second ends 12b of the waveguide 12 are coupled to a screen. In an effort to cure this deficiency in Veligdan, the Official Action relies upon the disclosure contained in Maiman et al. of a "TIR waveguide having a beveled edge coupled to a reflective surface." (Official Action, page 5, par. 8). This section of the Official Action, however, does not address nor cures the deficiencies in Veligdan discussed above. More particularly, this section of the Official Action fails to prove that Veligdan or Maiman et al. discloses waveguides having inputs that encompass relatively smaller cross-sectional areas as compared with outputs of the waveguides.

Accordingly, Veligdan and Maiman et al., considered singly or in combination, fail to render all of the features of at least independent Claims 1 and 24 of the present invention obvious. Accordingly, Claims 6-11, 27, 28, and 32-34 which depend from independent Claims 1 and 24, respectively, are allowable over the disclosures contained in Veligdan and Maiman et al. The Examiner is therefore respectfully requested to withdraw the rejection of Claims 13, 14, and 30, and to allow these claims.

In setting forth the rejection on page 5, paragraph 8, it should be noted that the Official Action has failed to address many of the features claimed in Claims 6-11, 27, 28, and 32-34. For instance, the Official Action has failed to prove that either Veligdan or Maiman et al. discloses a reflecting element comprising at least one reflector, as claimed in Claim 6. As another example, the Official Action has failed to prove that either Veligdan or Maiman et al. discloses a reflecting element having a plurality of reflectors oriented to receive multiple light beams, as claimed in Claim 7. The Official Action has, moreover, failed to provide any motivation or justification for combining Veligdan and Maiman et al. disclose any of these

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claimed features. Clearly, therefore, the rejection of Claims 6-11, 27, 28, and 32-34 is improper and should be withdrawn.


Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

Dated: April 18, 2007

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